

Comparisons of Job Characteristics

Focus Occupation: [Engineers, All Other \(17-2199\)](#)

Associated Occupation: [Electronics Engineers, Except Computer \(17-2072\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 94

Focus Occupation: Engineers, All Other (17-2199)

Associated Occupation: Electronics Engineers, Except Computer (17-2072)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Engineering and Technology	5.7	20.8	20.1	0 Current knowledge level may be sufficient
Design	5.2	20.6	16.5	<< Extensive education and/or training may be required
Computers and Electronics	8.4	19.7	15.0	<< Extensive education and/or training may be required
Mathematics	9.2	16.8	17.1	0 Current knowledge level may be sufficient
Physics	4.3	11.6	14.8	>> Current knowledge level is likely more than sufficient
Production and Processing	6.0	11.1	12.9	> Current knowledge level is likely sufficient
Mechanical	6.8	9.9	14.0	>> Current knowledge level is likely more than sufficient
Telecommunications	3.9	7.2	6.1	< Expanded education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 84

Focus Occupation: Engineers, All Other (17-2199)

Associated Occupation: Electronics Engineers, Except Computer (17-2072)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Systems Analysis	6.5	12.5	11.7	0 Current skill level may be sufficient
Quality Control Analysis	5.9	11.1	9.7	< A higher skill level may be required
Systems Evaluation	6.4	10.7	11.1	0 Current skill level may be sufficient
Troubleshooting	4.5	10.0	7.8	< A higher skill level may be required

Equipment Selection	3.3	9.0	6.3	<<	Extensive development of skills in this area may be required
Repairing	3.4	8.6	4.7	<<	Extensive development of skills in this area may be required
Programming	2.2	8.1	5.3	<<	Extensive development of skills in this area may be required
Technology Design	2.6	8.1	7.9	0	Current skill level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 97			
Focus Occupation: Engineers, All Other (17-2199) Associated Occupation: Electronics Engineers, Except Computer (17-2072)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Written Comprehension	11.0	14.5	15.1	0	Current ability level may be sufficient
Information Ordering	9.9	13.3	13.2	0	Current ability level may be sufficient
Mathematical Reasoning	6.3	12.8	13.4	0	Current ability level may be sufficient
Category Flexibility	9.0	11.6	12.3	0	Current ability level may be sufficient
Visualization	7.5	11.0	11.7	0	Current ability level may be sufficient
Originality	7.6	10.7	11.8	>	Current ability level is likely sufficient
Visual Color Discrimination	6.4	10.7	8.6	<	Some improvement in abilities may be required
Selective Attention	8.7	10.3	10.0	0	Current ability level may be sufficient
Memorization	5.6	7.6	7.3	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

There are no common work activities.

Tools and Technologies that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 87
Focus Occupation: Engineers, All Other (17-2199) Associated Occupation: Electronics Engineers, Except Computer (17-2072)		
Tools and Technologies	Exclusivity	
Business function specific software	1	
Computers	1	
Content authoring and editing software	1	
Data management and query software	1	
Development software	4	
Electrical measuring and testing equipment	7	
Electronic and communication measuring and testing instruments	14	
Finance accounting and enterprise resource planning ERP software	2	

Indicating and recording instruments	2
Industry specific software	1
Information exchange software	1
Integrated circuits	18
Light and wave generating and measuring equipment	4
Network applications software	1
Operating environment software	12

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.